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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 01/26/2010

Woodard, Emhardt, Naughton, Moriarty and McNett Bank One Center/Tower Suite 3700 111 Monument Circle

Indianapolis, IN 46204-5137

EXAMINER

LEAVITT, MARIA GOMEZ

ART UNIT PAPER NUMBER

1633 DATE MAILED: 01/26/2010

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | | |
|---|-------------|----------------------|---------------------|------------------|--|--|--|
| 10/025,282 | 12/19/2001 | Mark W. Bleyer | 3433-333 | 5918 | | | |
| TITLE OF INVENTION: RADIOPAQUE IMPLANTABLE COLLAGENOUS BIOMATERIAL DEVICE | | | | | | | |

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 04/26/2010 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

| appropriate. All further indicated unless corrects maintenance fee notifica | correspondence includir ed below or directed oth tions. | ng the Patent, advance onerwise in Block 1, by (| | | | | correspondence address as arate "FEE ADDRESS" for |
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| CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) | | | | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. | | | |
| Bank One Cente Suite 3700 | r/Tower | v2010 Moriarty and McNe | ett I S au | hereby certify that tates Postal Service ddressed to the M ansmitted to the US | ertificat this Fee with su ail Stop PTO (5 | e of Mailing or Trans (s) Transmittal is being fficient postage for fir- ISSUE FEE address 71) 273-2885, on the d | mission g deposited with the United st class mail in an envelope above, or being facsimile ate indicated below. |
| 111 Monument (Indianapolis, IN | | | | | | | (Depositor's name) |
| 1 , | | | | | | | (Signature) |
| | | | | | | | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO | OR | ATTO | DRNEY DOCKET NO. | CONFIRMATION NO. |
| 10/025,282 | 12/19/2001 | | Mark W. Bleyer | | | 3433-333 | 5918 |
| | | ANTABLE COLLAGEN | | | | | |
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| nonprovisional | NO | \$1510 | \$300 | | \$0 \$1810 | | 04/26/2010 |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | | | | |
| LEAVITT, MA | | 1633 | 424-600000 | | | | |
| I. Change of correspondence address or indication of "Fee Address" (37 CFR 1.561). Change of correspondence address (or Change of Correspondence Address (or Change of Correspondence Address form PTOSB/122) attached. Tee Address 'Indication (or 'Fee Address' Indication form PTOSB/127) or more recent) attached. Use of a Customer Number is required. | | | (I) the names of up or agents OR, alterns (2) the name of a sir registered attorney of 2 registered patent a | For printing on the patent front page, list the names of up to 3 registered patent attorneys agents OR, alternatively, the names of up to 3 registered patent attorneys the names of a single firm (having as an member a 2 gistered attorney or agent) and the names of up to gistered patent attorneys or agents. If no name is 3 | | | |
| PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG | less an assignee is ident h in 37 CFR 3.11. Comp GNEE | | data will appear on the T a substitute for filing : (B) RESIDENCE: (CI | patent. If an assignment. I'Y and STATE OF | .COUN | TRY) | ocument has been filed for |
| 4a. The following fee(s) Issue Fee Publication Fee (N | vo small entity discount p | | b. Payment of Fee(s): (P A check is enclosed Payment by credit of The Director is here overpayment, to De | I. card. Form PTO-20 by authorized to cl | 38 is att | ached. required fee(s), any de | |
| | s SMALL ENTITY state | as. See 37 CFR 1.27. | ☐ b. Applicant is no l | | | | |
| NOTE: The Issue Fee an interest as shown by the | d Publication Fee (if req records of the United Sta | uired) will not be accepte ites Patent and Trademark | d from anyone other that Office. | n the applicant; a re | gistered | attorney or agent; or th | ne assignee or other party in |
| Authorized Signature | | | | Date | | | |
| Typed or printed nam | e | | Registration | No | | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223 | nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC k13-1450. | CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR | on is required to obtain of 1.14. This collection is depending upon the in- e Chief Information Off COMPLETED FORMS | or retain a benefit by estimated to take 1 dividual case. Any icer, U.S. Patent ar TO THIS ADDRE | the put 2 minute commen d Trade SS. SEN | olic which is to file (and is to complete, including its on the amount of timark Office, U.S. Dep ID TO: Commissioner | d by the USPTO to process) g gathering, preparing, and me you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450, |

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| 75 | 90 01/26/2010 | EXAMINER | | | |
| Woodard, Emhar | dt, Naughton, Moria | LEAVITT, MARIA GOMEZ | | | |
| Bank One Center/Tower | | | ART UNIT | PAPER NUMBER | |
| Suite 3700 | | 1633 | | | |

111 Monument Circle Indianapolis, IN 46204-5137

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/025,282 BLEYER ET AL. Notice of Allowability Examiner Art Unit MARIA I FAVITT 1633 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 10-09-2009. The allowed claim(s) is/are 54-60, 62, 66 and 67. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /Maria Leavitt/

Primary Examiner, Art Unit 1633

Application/Control Number: 10/025,282

Art Unit: 1633

Detailed action

Reasons for allowance

The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or suggest a radiopaque, implantable biomaterial device, comprising:

a bioabsorbable collagenous biomaterial including a plurality of collagenous strips that are bonded to one another to form a layered structure, wherein said collagenous strips comprise tunica submucosa tissue from a warm-blooded vertebrate tissue source and said collagenous biomaterial is effective to promote remodeling of tissue of a patient at a site at which said collagenous biomaterial is implanted, and wherein said strips are bonded to one another by using sutures, staples, or biocompatible adhesives or by dehydrating overlapping strips, said layered structure including a first collagenous strip having a surface opposing a surface of a second collagenous strip; and a radiopaque marker positioned and completely contained between said opposing surfaces of said first collagenous strip and said second collagenous strip.

Withdrawn rejections in response to Applicants' amendments

Claim Rejections - 35 USC § 103

The previous rejection of claims 54-60, 62, 66 and 67 under 35 USC § 103 as being unpatentable over Badylak et al., (US Patent No. 6,099,567, effective priority filing date, 10 December 1996) in view of Stinson et al., (US 2004/0111149 A1, Date of filing August 1, 1997) has been withdrawn in view of Applicants' amendment to claims 54 and 67.

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Note that the combined disclosure of Badylak et al., and Stinson et al., does not teach or suggest of a radiopaque, implantable biomaterial device, comprising a radiopaque marker positioned and completely contained between the opposing surfaces of a first collagenous strip and a second collagenous strip. Accordingly, a radiopaque marker that is diffused or not completely enclosed between the opposing surfaces of said first collagenous strip and said second collagenous strip will not fall within the scope of the claimed invention. Also note that a radiopaque marker positioned and completely contained between the opposing surfaces of said first collagenous strip and said second collagenous strip should not be reasonably expected to be released from the implant as the bioabsorbable material degrades into the systemic circulation as easily as the radiopaque marker in the bioabsorbable material taught by Stinson.

Claim Rejections - 35 USC § 112- Second Paragraph

The previous rejection of claims 54-60, 62, 66 and 67 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been withdrawn in view of Applicants' amendment to claims 54 and 67.

Conclusion

Claims 54-60, 62, 66 and 67 are allowed.

Application/Control Number: 10/025,282

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Leavitt whose telephone number is 571-272-1085. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Woitach, Ph.D can be reached on (571) 272-0739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 1633; Central Fax No. (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Maria Leavitt/

Maria Leavitt Primary Examiner, Art Unit 1633